

Journal of the Royal Society of Arts

No. 4897

FRIDAY, 17TH APRIL, 1953

VOL. CI

FORTHCOMING MEETINGS

*WEDNESDAY, 22ND APRIL, AT 2.30 p.m. "Buckingham Palace", by H. Clifford Smith, M.A., F.S.A. The Right Honble. the Earl of Cromer, P.C., G.C.B., G.C.I.E., G.C.V.O., will preside. (The paper will be illustrated with lantern slides.)

THURSDAY, 23RD APRIL, AT 5.15 p.m. COMMONWEALTH SECTION. THOMAS HOLLAND MEMORIAL LECTURE. "Colonial Universities To-day", by Sir Alexander Carr-Saunders, M.A., F.B.A., Director, London School of Economics. The Right Honble. Lord Hemmingford, M.A., late Rector, Achimota Training College, will preside. (Tea will be served from 4.30 p.m.)

*MONDAY, 27TH APRIL, AT 6 p.m. The first of three CANTOR LECTURES on "The Novel", entitled "The Novelist's Task," by Dennis Wheatley.

WEDNESDAY, 29TH APRIL, AT 2.30 p.m. SIR WILLIAM JACKSON POPE MEMORIAL LECTURE. "The Scientist's Place in the Services", by O. H. Wansbrough-Jones, C.B., O.B.E., M.A., Ph.D., Chief Scientist, Ministry of Supply. General Sir Kenneth Crawford, K.C.B., M.C., Controller of Supplies (Munitions), Ministry of Supply, will preside.

*MONDAY, 4TH MAY, AT 6 p.m. The second of three CANTOR LECTURES on "The Novel", entitled "The Function of the Publisher", by Michael Joseph.

WEDNESDAY, 6TH MAY, AT 2.30 p.m. "The Great Seal of England", by Sir Hilary Jenkinson, C.B.E., M.A., LL.D., F.S.A., Deputy Keeper of the Records. The Right Honble. Sir Raymond Evershed, Q.C., F.S.A., Master of the Rolls, will preside.

*MONDAY, 11TH MAY, AT 6 p.m. The last of three CANTOR LECTURES on "The Novel", entitled "The Bookseller and the Reading Public", by Christina Foyle.

WEDNESDAY, 13TH MAY, AT 2.30 p.m. TRUEMAN WOOD LECTURE. "Training for Science and Technology", by Sir Richard Southwell, M.A., LL.D., D.Sc., F.R.S., Joint General Secretary, British Association for the Advancement of Science. E. Munro Runtz, F.R.I.C.S., Chairman of the Council of the Society, will preside.

*Fellows may reserve seats for this meeting if they wish.

CECIL RHODES CENTENARY

A special meeting of the Commonwealth Section will be held on Thursday, 14th May, to celebrate the centenary of the birth of Cecil Rhodes, at which a paper on Cecil Rhodes will be read by The Right Honble. Viscountess Milner. The Right Honble. Lord Altrincham, P.C., K.C.M.G., K.C.V.O., will preside.

Her Majesty Queen Elizabeth, The Queen Mother, has graciously indicated that she will attend Lady Milner's address, which will be given at 5.15 p.m.

In view of the large number of Fellows who will wish to be present, admission to this meeting will be by reserved seat ticket only, and those wishing to attend should apply to the Secretary by 27th April. Applications will be dealt with in rotation and in the first instance not more than two tickets will be issued to any one Fellow. In accordance with the normal practice at meetings of the Commonwealth Section, tea will be available in the Library from 4.30 p.m.; but it would be appreciated if those attending could be seated by 5.10 p.m.

MEETING OF COUNCIL

A meeting of Council was held on Monday, 13th April, 1953. Present: Mr. E. Munro Runtz (in the Chair); Professor E. N. da C. Andrade; Mr. F. H. Andrews; Mr. A. C. Bossom; Sir Frank Brown; Mr. Wells Coates; Sir Edward Crowe; Mr. P. A. Le Neve Foster; Captain L. G. Garbett; Mr. John Gloag; Sir Ernest Goodale; Mr. A. C. Hartley; Dame Caroline Haslett; Dr. R. W. Holland; Lord Horder; Mr. Hugh Lyon; Mr. G. K. Menzies; Mr. F. A. Mercer; Mr. O. P. Milne; Sir William Ogg; Lord Radnor; Mr. E. M. Rich; Sir Andrew Rowell; Sir Harold Saunders; Sir Selwyn Selwyn-Clarke; Sir John Simonsen; Mr. William Will; Mr. J. G. Wilson; Sir John Woodhead, and Miss Anna Zinkeisen; with Mr. K. W. Luckhurst (Secretary) and Mr. R. V. C. Cleveland-Stevens (Assistant Secretary).

ELECTIONS

The following candidates were duly elected Fellows of the Society:

Baylis, Paul David, Hastings, Sussex.
 Eccles, Josiah, C.B.E., B.Sc., Woolton, Nr. Liverpool.
 Fildes, Sir Paul Gordon, O.B.E., M.A., F.R.S., Oxford.
 Gibson, Sir Edmund Currey, K.C.I.E., Clement Town, U.P., India.
 Grainger, Bernard Montague, A.R.C.A., Bradwell, Derbyshire.
 Green, Miss Hilda, Halifax, Yorks.
 Greenwood, James Mantle, J.P., Hampton, Middx.
 Hole, Ernest Roland, M.I.Struct.E., Sawbridgeworth, Herts.
 Hutchison, William Millar, Kingston Hill, Surrey.
 Jarvis, Basil Stanley Halsey, Guildford, Surrey.
 Jordan, Reginald Charles, Knysna, Cape Province, South Africa.
 Kaan, Se-Leuk, Hong Kong.
 Kearns, Sir Henry Ward Lionel, C.B.E., Altrincham, Cheshire.
 Lamb, William Eric, Southport, Lancs.
 Mackay, Robert John, J.P., Dornoch, Sutherland.
 Manuwa, Mrs. Theodora Ayo, London.
 Negretti, Paul Ernest, London.

Parker, Cecil John Warner, London.
 Paterson, Miss Betty, Melbourne, Victoria, Australia.
 Payne, Henry Richard, O.B.E., Ashurst, Kent.
 Perrin, Miss Pamela Marjorie, Welling, Kent.
 Pinfold, Ernest Sheppard, M.A., F.G.S., Carnforth, Lancs.
 Russell, Miss Dorothy, Sheffield, Yorks.
 Sims, Alfred John, O.B.E., R.C.N.C., Bath, Somerset.
 Smith, Norman Fairbridge, B.A., London.
 Stead, Peter, D.F.C., Kirkburton, Yorks.
 Stevens, Paul Percy, Framlingham, Suffolk.
 Sutcliffe, Peter, B.Sc.(Tech.), A.M.I.C.E., London.
 Taylor, Ray Kingsley, Leamington Spa, Warwicks.
 Thompson, Norman George, London.
 Tseung, Fat In, M.B., B.S., Hong Kong.
 Turner, Charles Bayard, London.
 Woo, Arthur Wai-Tak, M.B., B.S., F.R.C.S., Hong Kong.
 Wu, Ta Piao, M.B., B.S., Hong Kong.

Associate Member (Examinations Silver Medallist):

Bardrick, Miss Jean Valerie, London.

The following have been awarded Associate Membership as winners of Industrial Art Bursaries in 1952:

Grierson, Martin Cunningham, London.
 Hagg, Miss Rhoda Jean, Norwich, Norfolk.
 Holdaway, William Bernard, Kingston-on-Thames, Surrey.
 Matthews, Miss Josephine Ann, Richmond, Surrey.
 Needham, Miss Jacqueline, Coventry, Warwicks.
 Pedel, Donald Raymond, Wendover, Bucks.
 Portman, Raymond Dennis, Belbroughton, Worcs.
 Summers, Leonard, Birmingham.
 White, Miss Ursula Marion, London.
 Whiteside, Roland Darnell, Ewell, Surrey.
 Wilkins, Miss Gaybrielle Vernon Stephen, Broadstairs, Kent.

The following have been admitted under Bye-Law 66:

Acton Public Libraries, London.
 Spring Grove Polytechnic, Isleworth, Middx.

ALBERT MEDAL

Further consideration was given to the award of the Albert Medal for 1953.

SOCIETY'S TRUST FUNDS

A comprehensive report on the present position and administration of the Society's numerous Trust Funds, which had been prepared by the Finance and General Purposes Committee, was adopted.

REPORT OF THE COMMITTEE ON THE LAW AND PRACTICE RELATING TO CHARITABLE TRUSTS

At the suggestion of Lord Nathan, Chairman of the Committee on the Law and Practice relating to Charitable Trusts, it was decided to convene a representative Conference to discuss the Report recently presented by the Committee. (Details will shortly be given in a further announcement.)

OTHER BUSINESS

A quantity of financial and other business was transacted.

A REFORMED CALENDAR

A paper by

THE RIGHT HON. LORD MERTHYR, T.D.,

Chairman of the British Committee of the World Calendar

Association, read on Wednesday, 17th December, 1952,

with Sir Harold Spencer Jones, M.A., Sc.D., LL.D.,

D.Phil., F.R.S., the Astronomer Royal, in the Chair

THE CHAIRMAN: The subject of the paper which is to be read this afternoon by Lord Merthyr is "A Reformed Calendar". The calendar that we use to-day is essentially the one that was introduced by Julius Caesar about B.C. 45, slightly modified by Pope Gregory XIII in 1582, that modified calendar not being introduced into this country until 1752.

The fact that the Julian calendar with only slight alterations has persisted through all these centuries is an indication that it was a pretty good calendar. It was, at any rate, a very considerable improvement on any calendar that there had been before it was introduced. But, of course, that does not mean that it is in any sense the perfect calendar and that it could not be reformed in various ways with advantage. We think that the calendar could be reformed and that it does, in fact, really need reform, and that is what Lord Merthyr is going to deal with. He is going to tell us how it could be improved and speak about some of the disadvantages under which we labour with our present calendar system.

Lord Merthyr, of course, needs no introduction to an audience here in London, so I am not going to speak about what he does and so on. I am going to ask him forthwith to read this paper on the reformed calendar.

The following paper was then read:

THE PAPER

It is appropriate that in the year 1952 attention should be focussed on the calendar, a facility which is in such constant use that we take it for granted, and do not pause to consider whether it could be of even greater assistance than it is.

It is just two hundred years since the Julian calendar gave way in Britain to the present Gregorian calendar, a change which was not made without much opposition. The cry "Give us back our eleven days" is not yet forgotten; and it is on record that some people seriously thought that they were losing eleven days of their lives. Even this reform was not made in this country for 170 years after it had been adopted on the continent; and it was not until after the First World War that some Eastern European countries accepted the Gregorian calendar. It is indeed strange that there should be such reluctance to accept reforms of this nature. It will be remembered what weird arguments were put forward, even by Members of Parliament, when Summer Time was introduced into this country in 1916—arguments such as that cows would not give milk, and so forth. Indeed, a few diehards refused for many years to alter their clocks to conform to the new time.

I was one of those who last October had the privilege of hearing a lecture delivered by the Chairman, in which he dealt very fully with the history of the calendar. May I say how interesting and instructive I found that lecture to be; for without a knowledge of the beginnings of the calendar and of past attempts to improve it—without the historical background—it is difficult properly to plan any future reform. The great majority of us have never considered the magnitude of the difficulties which the early calendar makers had to face. He explained very lucidly the defects of the old calendars, and the many attempts, some clumsy, some wise, to improve upon this instrument which is so useful in our everyday lives.

Remembering that the idea of reform is no new one, it is interesting to study the multitude of proposals which have from time to time been made. Not less than 152 different suggestions were examined by the League of Nations. Some of these were both ingenious and drastic. They included, to mention only a few, a year containing 73 five-day weeks, with every fifth day a holiday; a year of 20 months, each of 3 six-day weeks, with leap-weeks of seven days five times a year; a year of 12 thirty-day months divided into 5 six-day weeks. After an exhaustive sifting the League reduced these proposals to two, namely, a reformed thirteen-month calendar, and one particular reformed twelve-month calendar, which has been called the World Calendar; and I shall so refer to it to-day.

It seems to me that this work will never be wasted, because we can now start where the League left off, having decided that two proposals only are worthy of serious consideration. In saying this I do not wish to criticize unfairly the many others which have been put forward; but I sincerely believe that none of these approaches in usefulness the two selected by the League. Before passing from them I will mention only one other which is being now discussed as a rival to the World Calendar, namely, the Edwards Calendar, which so far as I know differs only in that the weeks begin on Mondays instead of on Sundays.

Let me next deal briefly with the proposed calendar of 13 twenty-eight-day months, which was put forward some years ago by the International Fixed Calendar League, headed by a Canadian accountant from Yorkshire, Mr. Moses Cotsworth. I admit at once that, although I am a strong supporter of the World Calendar, I have always been attracted by the thirteen-month plan, its great merit being that every month has an equal number of days, and that is a very great merit, which the World Calendar does not share. However, I am satisfied that there would be even more opposition to this than to the twelve-month fixed calendar. The principal defect of the thirteen-month plan is that the half-years and quarters, except at the beginning of the year, do not begin on the first day of a month. (Our present quarter days, of course, do not either.) There are also I understand superstitious objections, but to these I pay no attention. The reformed twelve-month or "World" Calendar therefore is the one above all others for which to my mind we all ought to strive. Since, however, by common consent this question must be decided by some international body, that body could and should review once again and finally all the suggestions which have been made, including of course the thirteen-month plan.

The World Calendar Association, of New York, is the sponsor of the twelve-month reformed plan, and I should like to pay tribute to it, and in particular to its President, Miss Elisabeth Achelis, who is literally devoting her life to this reform, which I am convinced will one day be adopted. I hope that her name will always be associated with it. She is nobly carrying on her campaign against the innate and deep-rooted conservatism which permeates our world and clogs the wheels of progress.

Let me next outline some of the disadvantages of the present calendar. The fact that it is impossible to have an exact number of weeks in the year necessitates that, so long as we never have more or less than seven days in the week, the months must begin on seven different weekdays. In other words, the first day of the month is a wandering event. This of itself creates innumerable difficulties, to which we have become so accustomed that we put up with them without considering whether they could be avoided. May I somewhat daringly give an example from my own experience? I have regularly a meeting on the second Tuesday of every month. The organization in question for its own convenience also meets on the preceding day, which is usually the second Monday of the month. It sometimes happens, however, that the day before the second Tuesday is not the second Monday, but the first, in which case it clashes with another meeting on the first Monday of every month. In 1952 this happened three times. This little example you may consider to be as trivial as it is personal; but I can assure you that in my own case alone it can be multiplied many times, and that not a month passes without this causing me noticeable inconvenience, which irritates all the more because I know that it is unnecessary. I expect that in my audience there are many who could find in their own personal and business lives a number of similar examples.

It is not always realized that in our present calendar the two half-years are unequal, containing 181 and 184 days respectively. (No one seems to complain that he has to work for three days longer for the same salary in the second half-year.) Not even the quarters are of equal length, varying as they do from 90 days to 92 days. Everyone does know, however, that the calendar months have different lengths, and begin on every one of the seven days of the week. I have never been suitably impressed by the thought that August has 31 days and February only 28 entirely because the birthday of Augustus Cæsar was in the former month. (I wonder just how much trouble the vanity of this potentate has caused to the world.) We have now in fact at least 28 different patterns of a month.

The number of working days varies from 24 to 27, which is an inconvenience alike to employers and employed, and which, as I shall show, is quite unnecessary. Under the new plan the number of weekdays in a month will invariably be 26. This is achieved by always having five Sundays in thirty-one-day months, and four in thirty-day months. Another difficulty, but one which admittedly would not be entirely relieved by the World Calendar, but which would be removed if we had thirteen months, is that there are now sometimes five market or shopping days, Fridays or Saturdays, in a month, on which the housewife buys her supplies, whereas in other months there are only four. She finds, however,

that her husband's salary, if he is paid monthly, is not increased when there are five market days as against the usual four. Again, in some years we now have 53 Mondays upon which insurance cards have to be stamped, in most years only 52. In some years there are 53 weekly pay days, which introduces unnecessary complications to P.A.Y.E.

Those interested in the dating of historical events find it difficult to work out upon which day of the week well-known incidents actually happened. It is troublesome, is it not, to have bank and public holidays occurring on different dates of the month, as does August Bank Holiday; or on different days of the week, as does Christmas Day. Have you ever thought of the inconvenience which can be caused by Christmas Day falling on, say, a Thursday, as it does in 1952, as compared with on a Monday, which is thought by most people, though perhaps not by all, to be the most convenient day upon which to have it? (In the Reformed Calendar it will always be on a Monday.) It cannot be good for industry and commerce to have a two-day Christmas holiday in the middle of a week, and then, after one or one and a half working days, to have another holiday at the week-end. But this is what we shall do in 1952, when those who work on Saturdays will have their Christmas holiday split into two.

Then again, what a waste it is to have to buy a new calendar and a new diary every year. I know that I am treading on somebody's toes in saying this; but what a saving there would be if we all knew the calendar by heart, and never needed to look at it on paper. I know that you are longing to tell me that I will put calendar makers out of employment, but I regard their work as being almost completely unproductive, and it would be interesting to know how many tons of paper are annually wasted in making unwanted calendars. They might instead produce permanent calendars, more artistic than the present flimsy ones designed only to be thrown away. To sum up this list, which is by no means exhaustive, of the disadvantages of our present calendar I might mention the painful necessity which some people have of learning nursery rhymes before they can put the date at the top of a letter.

ADVANTAGES OF THE NEW CALENDAR

What then is this magic change which would substitute ease for convenience? It is really very simple. I have already mentioned that the root of all our troubles is that in our solar year there is not an exact number of weeks; in other words that 365 is not exactly divisible by seven. It is divisible by no number except five, and there are many objections to five-day weeks. The World Calendar takes this difficulty in its stride, and excludes from the week, though not from the month or from the year, one day in ordinary years and in leap years two days. Thereafter the first day of every year, of every half-year and of every quarter will fall on a Sunday. Likewise in every quarter the first day of the first month will always be a Sunday; the first day of the second month will be a Wednesday; the first day of the third month will be a Friday. Observe how the difficulty of the clashing of engagements at once disappears. Reverting to my own personal troubles, the day preceding the second Tuesday of the month will never fall on the first

Monday of that month; the meetings which I have on those days will never collide or overlap, my excuse for not going to the meetings will disappear, and I shall have to think of some other pretext for being lazy.

How tidy it would be to have every half-year and every quarter exactly alike! I know that in this country, as I am constantly reminded, it is not popular to be tidy or logical. Therefore perhaps it will not do for me to stress this point too much. Seriously, though, will not business firms agree that to have the same number of working days in every month will be a benefit, and that to have only three different patterns of months instead of 28 cannot but be of advantage? Will not government departments welcome the disappearance of 53 Mondays in a year and the Inland Revenue the removal of 53 pay days? It will be so much easier to compute the dates of past events, and to memorize the whole calendar without having to buy every year an aide-memoire to clutter up one's desk. I do not know much about calendar-watches or clocks; but I have little doubt that they will be easier and cheaper to construct if the new calendar should be adopted.

I ought to say more about the *non dies* which, by being excluded from any week, enables us to secure all these advantages. This day would be a universal public holiday. It would probably be interposed after the last day of every year, between Saturday the 30th of December and Sunday the 1st of January. Likewise in leap years a second public holiday will be interposed between Saturday the 30th of June and Sunday the 1st of July. It is true that in England the end-of-year holiday will follow close upon the Christmas festivities; but it is an ill wind that blows no one any good, and our Scottish friends will be able to extend their end-of-year revelries by yet another day.

It might of course be universally preferred, and so decided, to have the new annual holiday every year on the 31st of June, which might be popular in the northern hemisphere, and which would not interfere with the Christmas holiday. The extra leap year holiday could then be at the end of the year, or it could, if preferred, follow the summer holiday, in which case it would be the 32nd of June. Having a new holiday in June would also help to spread our own summer holidays over a longer season of the year. All these, however, are considerations of relatively minor importance, which would be decided by the majority vote of the United Nations. What really matters is that whatever is decided upon should be universally adopted.

Not only would the Reformed Calendar dispose of some unnecessary anomalies in our social contacts and affairs, but from a commercial point of view it would add greatly to the efficiency of industrial undertakings. Efficient production depends largely on available tools; and the calendar is a tool which every industry, from the greatest to the smallest, must use every day. No comprehensive survey has been carried out, so far as I am aware, of the benefits which might accrue to industry from this particular reform; but it is easy to imagine the added convenience which it would give to accountants and statisticians in facilitating comparison of periodic production figures; to the railways and insurance companies; to the banks; and to world-wide industrial undertakings which no doubt have to wrestle with calendar complications. Besides the existence of different

calendars in various parts of the world, the statistical analysis of production by months, weeks or working-days, after allowing for the incidence of irregular holidays on wandering dates, is a mathematical proposition which has not only given perpetual worry to those whose duty it is to compute such figures, but has wasted incalculable time and money in producing them.

In the informative Journal dealing with this subject which is published quarterly in New York by the World Calendar Association, a writer recently claimed that, merely by adopting this reformed, stabilized and perpetual calendar the United States would save enough to pay off its national debt. I find it a little difficult unreservedly to accept this claim; but I have no hesitation in agreeing that there must be a very high cost to be paid for broken working weeks due to the vagaries of our present calendar. However this may be, there is one interesting computation which was published in the same Journal recently, and which was based on official national statistics. This estimated the loss in wages in the United States in 1952 due solely to the incidence of calendar irregularities at 461 million dollars, which is a large sum.

I should like to say a further word about the railways, the activities of which have to be fitted into the calendar scheme, and to which the even distribution of time-schedules is perhaps more important than to any other industry. I should say that any railway official would agree about the complexity of the problems set up by a wandering Easter and Whitsun. In some financial years there are two Easters, in others there are one, in some there are none. The same applies in greater or lesser degree not only to every holiday, such as Christmas, which never now falls on the same day of the week in two consecutive years, but also to the carrying of freight of all kinds, the delivery of which is often determined by periodic contracts which vary in their intervals merely because of the dissimilarity in the lengths of the months. It is interesting to realize that as many as 30 years ago railway executives expressed themselves on the subject. In reply to a questionnaire addressed to the various companies by the London Chamber of Commerce, I think in 1921, the replies were overwhelmingly in favour of reform of the calendar. I might mention here, that the London Chamber of Commerce has been actively in favour of reform since 1911, when it passed a resolution urging the Government to give its attention to this problem.

The added convenience which banks and financial houses generally may expect from a reformed and regular calendar are so obvious that I mention them with reluctance. However, I will touch on one point in this connection—the ending of the years, half-years and quarters at the week-end—not just occasionally as now, but always. It is patent that the Saturday, followed by the Sunday, provides the best rounding-off moment for quarterly accounts, all the more because under the World Calendar each quarter would be exactly comparable with every other quarter, having 91 days made up of three months, each with 26 weekdays. I imagine that a bank's interest-tables, or ready-reckoning system for charging interest on our overdrafts, would be vastly simplified. And naturally this applies to mortgages and financial operations of all kinds.

So much for industry and the world of finance. I think I should try to show that adoption of the World Calendar would be no less advantageous in more æsthetic fields, for example in education and in science. I hesitate before an audience so distinguished to touch on the impact of such a reform on scientific research, but I would with respect submit that time measurement in its broader aspects—in between micro-seconds and light-years, let us say—is important; and that the adoption of the World Calendar in the scientific field would not be entirely incomparable with that other great reform which took place a century or so ago—the almost universal institution of the metric system of measurement. What a brake the lack of that method might have put on the wheels of scientific progress!

Then in the world of education: in so many aspects of school life—from the University down to the local infant's class—the working out of term periods and holidays, as well as the timing of examinations, is quite unnecessarily complicated. The fact that under government regulations a minimum number of days attendance must be completed in each term, for example, while the ends of terms must somehow be made to fit into the traditional holidays, leads to many strange anomalies, such as a term beginning on a Thursday or on Friday, and being followed by two days without classes, including a Sunday, before the students have had time to settle in. In the future school terms could always begin and end on the same days of the year. These difficulties could be avoided under any perpetual calendar, and I submit that with the proposed World Calendar the whole educational set-up would run more smoothly. The equal quarterly divisions might well lead to a minor educational revolution, since they would encourage a complete rearrangement of the system—I have no doubt for the better.

OBJECTIONS TO THE CHANGE

I should be foolish if I tried to hide the fact that there are objections to the World Calendar. One reason for the reluctance to adopt it is no doubt mere apathy, which many reformers have found the most difficult obstacle to overcome. There will I suppose be thousands who will oppose this change, as they oppose all changes, merely because it is a change. There are also, however, objections which carry weight, which are put forward by authoritative sources, which deserve analysis and invite argument.

The most serious objection is religious. I must speak with care in dealing with this matter, but it is one which must be faced, and which cannot be ignored. I will try to deal with it objectively, and I hope I shall be believed when I say that I have proper respect for the religious beliefs of others, and that I am a strong believer in religious toleration. It must unfortunately be said, however, that we put up with much unnecessary inconvenience, such as for example the wandering date of Easter and Whitsun holidays, on account of religious objections. (Let me remind you that it is possible to reform the calendar without fixing Easter; just as it is possible to fix Easter without reforming the calendar.) The reason for the religious objection is simply that once in ordinary years, and twice in leap years, more than six days would intervene between two Sabbath days.

So far as I am aware, however, objections on this account are confined to two religious bodies only: the Jews and the Seventh Day Adventists, both of which object on principle to the additional day once a year. I must express my opinion, and forecast that the progress of the world will not indefinitely be allowed to remain in this respect static merely on account of these religious objections. It will, of course, be quite possible for Jews to have the Sabbath on any day they choose, just as now they do not have it on the same day as do Christians. Also, since the *non dies* will be a holiday, it will be unnecessary for any more work to be done on it than is now done on Sundays.

In answer to this objection there is however, it seems to me, one argument which clinches the matter. What happens when a Jew arrives in the course of travel at the international date line? If he crosses it, it does not matter whether from East to West or West to East, he must either have eight days in a week or six; or he may arrive at the line on a Sunday, in which case he must either have two consecutive Sundays or none at all. This seems to me to be a devastating reply to those who say that there can never be more than six days between Sabbaths. In reality of course this difficulty, which is no new one, is got over; and in the same way fresh difficulties which a reformed calendar may create will likewise be got over. So far as I know, neither Jews nor Seventh Day Adventists refuse to cross the date line for religious or any other reasons.

I am uncertain about the attitude of the Roman Catholic Church. A short while ago I suggested that the date of Easter should for everybody's benefit be fixed. (It is not always appreciated that our own Parliament passed an Act to do this, subject to religious agreement, in 1928.) I was confronted with the difficulty of obtaining the consent of all the religious bodies, each of which said, broadly speaking, that they would agree if all the others did; but I found it apparently impossible to get the consent of the authorities in Rome. The question could only be decided by the General Council. I naturally said, "Let us therefore ask the General Council". But I was told: "It has not met since 1870 and the next meeting has not been arranged". With the greatest respect, this does not seem to me an efficient way of doing business. I may perhaps mention that when calendar reform was debated in the House of Lords in 1936 it was strongly supported by the then Archbishop of Canterbury.

I shall of course be told of many other objections, real and supposed. It will be said that I am destroying variety, which is the spice of life, and removing interesting anomalies without which existence would be drab and commonplace. To which my answer is "If variety and anomalies are in themselves good, why not create more?" Why not for example have a different number of months in each year? How exciting it would be if we settled annually how many weeks or days we should have next year? These nursery rhymes are all very well; but behind them lies in reality a mass of inefficiency, waste, impoverishment and annoyance which is only tolerated because it is always with us.

Then there is the complaint that people will lose their birthdays. George Washington, I believe, had to have two birthdays in the year in which the calendar was last changed. This objection I could claim not to take seriously,

but for the surprising number of times it is put forward. What about people who now have birthdays on the 29th of February? There must be thousands of these, and they seem to get along in a quiet sort of way. I shall be told that this would create an upheaval of a disrupting nature, an historical break with long-established tradition; but are there not many other things which are crying out for reform, and some which have obtained it, which are also a break with tradition? Are we to refuse to abolish slums or slavery, the drug-traffic, or war itself, merely because they are established by a long tradition? There are also possible legal objections. All these could be got over, however, by inserting a section in the Act of Parliament, making it clear that the days of the new calendar will have the same legal validity as the corresponding days of the old. In fact, a comparative table could be incorporated as a schedule in the Act of Parliament itself. I believe that this was done in 1752.

There will, in fact, be surprisingly little dislocation caused by the change over. A year will be chosen—I say will, because I am convinced that this thing is going to happen—in which according to the present calendar the first of January falls on a Sunday. This happens regularly every five or six years. It occurs in 1956 and in 1961. Every time it happens hope is renewed that the next opportunity will be taken to effect the change. Ample notice must and will be given; at least two or three years' notice in my opinion is necessary; since many publications, such as for example the Nautical Almanack, have to be prepared many years ahead of that in which they are used. When the time comes and the new calendars and almanacks have been printed in their permanent form, the actual change will hardly be felt. The first thing that many people will know about it is when they date a letter, in whatever year it may be, on the 30th of February. (For comparative purposes, by the way, it will be easy for everyone to have at his elbow a table showing the days of the new calendar which correspond to those of the old.)

How shall this change be brought about? I concede at once that it is no case for unilateral action by our own or any other government. Obviously it is desirable that there shall first be action by the United Nations or some international body, followed by ratification by at least the principal countries of the civilized world. The first thing, however, is to get some government to place the matter on the agenda of the United Nations. So far all efforts to get our own Government to do this—and I speak of course from an entirely non-party standpoint—have signally failed. They will not even put it on the agenda, which I must say is deplorable. I know the official answer only too well. It is that there is no evidence of public demand. I should have thought that it was the function of the Government to govern; but the attitude seems to be that nothing can be done until the mob is at the door, which, translated into official language, is rendered, "We have no mandate from the people". But are there no bills at present in Parliament upon which the electorate have not been consulted at all? And I wonder what popular mandate there was for the Daylight Saving Act, during the First World War? Some of the speeches in Hansard on the debate on that Bill are worthy of study as a method of showing just how wrong some of our

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legislators can be, and just how dangerous it is to prophesy dire results for a change just because it is a change. If our Government will not support this change may we not at least ask that it will not oppose it, and not prevent it from being discussed by the only body which can usefully do so? One thing that is certain is that when this reform has been in operation for a few years people will say: "Why didn't we have this before?" Among those who will say this are many in Eastern and Asiatic countries which now have more than one calendar in the same national territory. India has fourteen. And does not the Eastern Orthodox Church still persistently adhere to the Julian Calendar, thus enabling a lucky traveller to enjoy two Christmas and two Easter festivals in one year?

I may have given the impression that no progress has been made. That is not the case. Calendar reformers in this country are not speaking with an entirely lone voice. In many countries the desire for reform is being urgently stated. Since the League of Nations brought the subject to the world's notice, no fewer than seventeen nations, professing several different religions, have indicated their readiness to adopt the World Calendar, including several Roman Catholic countries and three which adhere to the Muslim faith, or at least have large Muslim populations. The difficulty is that none of the so-called Great Powers has raised its voice in its favour. There is a strong movement working for the reform in France and also in Canada, India and Australia, as well as associations in many other countries. What the cause lacks is one loud united voice which will provoke action in high places. You will see therefore that for these ideas I can claim no originality; but it is now many years since I became an ardent disciple of them. If this paper, in the preparation of which I have had the valuable assistance of Mr. Harold Watkins, has made a contribution, however small, to the dissemination of these ideas, I am well satisfied. Needless to say also I am willing to be questioned about what I have said.

THE WORLD CALENDAR

JANUARY FEBRUARY MARCH
APRIL MAY JUNE
JULY AUGUST SEPTEMBER
OCTOBER NOVEMBER DECEMBER

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1 2 3 4 5 6 7	1 2 3 4	1 2
8 9 10 11 12 13 14	5 6 7 8 9 10 11	3 4 5 6 7 8 9
15 16 17 18 19 20 21	12 13 14 15 16 17 18	10 11 12 13 14 15 16
22 23 24 25 26 27 28	19 20 21 22 23 24 25	17 18 19 20 21 22 23
29 30 31	26 27 28 29 30	24 25 26 27 28 29 30
		W

W = Worldsdays (a world holiday), 31st December (365th day) every year.
Leapyear Day (a second world holiday), 31st June, occurs in Leap years only.

DISCUSSION

MR. LOUIS LOYNES: Would it not be better if, instead of speaking of a fixed Easter, which is impossible, we spoke of a fixed and so-called Easter holiday, which is quite a different thing?

THE LECTURER: The questioner says it is not possible to have a fixed Easter; I do not know why. But even if he is right—and I beg leave to disagree—even if you cannot fix Easter you could, I agree, fix the Easter holiday. The difficulty is that Good Friday rather complicates the matter. If you fix the spring holiday on a day other than the day following Easter Sunday you immediately divorce it from Good Friday, which I admit may be considered a good thing in religious circles, or it may not. We must face the fact that it might get separated from Good Friday and, therefore, instead of having a long Easter week-end you would only have one bank holiday isolated from Easter. I believe that high religious circles are not in favour of that; and everybody, I think, would like to avoid it and treat it as a second-best solution. For myself I say that if the Church authorities cannot agree to fix Easter—and they have every right not to agree—then I would rather have the second-best solution than none at all. But, of course, the ideal solution is to fix the whole of Easter and the holiday, and I have been assured by high authorities in the Churches that there is no doctrinal objection to fixing Easter. There is no doctrinal objection. In fact, as I have said in my paper, almost every religion has said, "We will do it if the others will agree". The trouble is we can get no further than that.

THE CHAIRMAN: I should like to make a comment on this point of the fixed Easter, because there are some rather interesting questions tied up with it.

Easter, of course, is related to the first full moon after the spring equinox and is related to the Jewish Passover. However, full moon occurs at a certain definite instant, which will not be—or almost invariably will not be—on the same date all the world over. So that if we fix Easter by the actual full moon, it will be celebrated in some parts of the world on one date and in other parts of the world on another date and Easter, therefore, is not fixed at all by the true moon. The tables which are used for determining the date of Easter in any year are not related to the true moon at all but to a sort of hypothetical moon. They are based on a length of the lunar month which is a close approximation to its average length, the true length of the lunar month, of course, being variable, and they give a time for the full moon which is partly in error by more than a day. But it can happen, and it sometimes does happen, that because we use the hypothetical moon and not the true moon, the date which is fixed by the tables may be a month away from the date that would be fixed if we used a true full moon. By the use of the tables, moreover, the same date is fixed for Easter all the world over. Therefore the way in which we fix the date of Easter at the present time

really entirely a matter of convention. I think most people would regard it as a welcome reform if we abandoned these old conventions and just adjusted Easter into a definite place in the calendar.

MR. JACK K. NUTLEY: May I ask if Lord Merthyr mentioned that Easter is already fixed by Act of Parliament? Also, with regard to his remarks about international action, is it not a fact that some leading countries have already declared their intention to place this matter on the next agenda of the United Nations?

THE LECTURER: Yes, some countries have, but, as I said, none of the great powers have done so. Quite a number of other countries have done so; at a guess, I should say a round dozen at least.

MR. N. S. PERCIVAL: Lord Merthyr has given us a most clear and convincing

statement and argument for the world calendar. Now I, personally, have a strong feeling in favour of the thirteen months. There are rather obvious objections, but I do not know whether he would, perhaps, tell us very shortly how his method is better than the thirteen months. The twenty-eight-day month with 4 seven-day weeks must clearly be a tremendous advantage, but there may be disadvantages.

THE LECTURER: As I have said I have always personally been very much interested in the thirteen-month plan. It may be because it was the first one to be brought to my notice many years ago, before I even heard of the present Association. It does, as the questioner said, have the very big advantage that every month would be alike in having an exactly equivalent number of days and every month would start on the same day of the week. That is a very big thing. On the other hand the half years and quarters would not start at the beginning of a month. You would have six and a half months and three and a quarter months in those periods, and that is a bit awkward. More generally, I suppose, a big objection is that it is a much bigger dislocation. The comparative days, of course, would be dislocated to a far greater extent. What you would do with the thirteen-month calendar is to insert a new month between June and July. It would go there because the dislocation would be smallest if you put it there. To put it anywhere else would result in greater dislocation. The effect of that would be that the whole of the first half of the year would be pushed back, so to speak, and the second half of the year would be pushed forward. That is a big change. It may be a good change, and it may come some day; but the only Association that is really fighting this matter on a big scale at the moment, having considered both plans, is strongly in favour of the twelve-month calendar, and if we want to get anywhere at all in the way of progress I believe we would do well to confine ourselves to the twelve-month reform, at any rate as a first instalment. You may say in objection to that "Oh, for goodness' sake don't have two changes". But it is better to get something of what we want than nothing at all, and there is a great weight of objection to the thirteen-month calendar, attractive though I admit it is.

MR. P. F. EVERITT: I have one or two points I should like to make; I have been more or less connected with industry all my life and the lecturer pointed out the advantages of getting the same number of working days in each month. This does not apply to-day; since the introduction of the five-day week that is no longer true.

Another thing is that most of the points made are very small. The great dislocations in industrial life are due to Christmas, Easter and Whitsun; Easter and Whitsun together being in general a much larger dislocation than Christmas.

The lecturer dealt with the smaller trouble and did not deal with the larger one. For accountancy purposes you would still not have your months all alike, or your quarters all alike under his system. Then, of course, I am not going to say anything about our friends North of the Border who would always find their Bank Holiday on the first day of the year—a special celebration—on a Sunday, to which they would probably raise objections, although the Bank Holiday could be transferred to the Monday; that is not a serious point at all. But I do think that we ought to take stock of the question seriously. If we add up the advantages which have been so ardently advocated, and even exaggerated a little, equally, I think we should examine the disadvantages and decide whether those advantages are really worth having. It is a big alteration; it would cost an awful lot of money to carry it out all over the world. If the total gain is only very small and the cost is high, obviously it should not be done.

THE LECTURER: There are several points there, and I will try and deal with them. First about the Saturdays. I do concede—I think I am right here, and my questioner is right—that if you do not work on Saturdays, if Saturday is not counted as a working

day, then you do not achieve the equality of working days in the month. That is so; but, of course, Saturday is a working day still for hundreds of millions of people.

Now the holidays. He said that Christmas was not so important as Easter and Whitsun. Well, that is a matter of opinion. It may be so, but is not Christmas of considerable importance, taken by itself? I personally think that the Christmas point is a big point. I cannot see that it is not very inconvenient to have Christmas in the middle of a week; of course some people may like it, but we have got to see which arrangement is best for the majority of people. Surely it is better to have Christmas either at the beginning of the week or at the end, and not in the middle? At any rate, let us all think of it this year, when Christmas is on a Thursday, especially those who have to go to work on Saturday, and see what we think about it; perhaps we have never thought about it before.

My questioner said that this was going to cost a lot; here I must join issue with him at once. I say that on the contrary this is going to save an enormous amount of money and that is one of the big advantages of this scheme. What is it going to cost? What is the money going to be spent on? The questioner says it is going to cost more; until he says in what way, I am afraid I cannot answer.

MR. P. F. EVERITT: One example of the cost would be that involved by the dislocation of the whole of the National Insurance Scheme. You have a day that is not part of any week; what are you going to do about it? Are people not to be insured for anything that happens on that day, or how are you going to bring it into a week? The cost of a whole Civil Service department and every factory in the country having to make special arrangements for that day would be enormous.

THE LECTURER: I am much obliged for the further details. It is this *non dies*, as I call it, that is the trouble, apparently. Now, I am not an expert on insurance, but I should have thought, perhaps wrongly, that the insurance people could have got over this difficulty. It is a holiday; I do not see why it should not be laid down in the Act of Parliament—there has to be an Act of Parliament—that it shall be deemed that a person who is insured for any purposes for all the other days of the year shall be deemed to be insured on this day. I may be wrong, but I do not see any great difficulty.

MR. P. F. EVERITT: I am not disputing the fact that Parliament can get over any trouble, or suggesting that our legislators are not sufficiently intelligent to devise such a solution but it is going to cost an awful lot of money in time and effort, not only in Parliament but in the whole of the government departments involved in insurance of all different kinds; in insurance companies and everything else. Whatever legislation is made will cause a lot of trouble and I only mention it because I say that before adopting such a scheme as this, the disadvantages and the expense involved should be considered. Is it worth it? I personally do not think so.

MR. DAMODAR JOSEF: May I make one humble submission. I am in favour of the thirteen-month calendar, because the object of a change is to eliminate as many disturbing factors in the calendar as possible. In the twelve-month reformed calendar that the lecturer suggested there will still be two leap-year days, one every year, a leap-year day on the 365th day, and one every four years, which he put at 31st June. In the case of the thirteen-month calendar, you would at least eliminate the fourth year leap-day, because in the thirteen-month year you would not have that extra day every four years. The lecturer's difficulty is that there will be a few days shifted in the first half of the year and a few days shifted in the second half of the year. We would put that thirteenth month at the end of the twelve months, that means after December. Originally this calendar had only ten months, as the names of the months in the year show, so I do not think there would be much difficulty in taking a little

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step more, putting the thirteenth month at the end of December, the twelfth month, and calling the new month by some suitable name.

THE LECTURER: Of course it is a matter of opinion, if you have a change at all, whether you are going to have twelve or thirteen months, and I respect those who do not agree with twelve months and want thirteen. I have been attracted very much by thirteen months myself, but on balance I prefer the twelve, and so in answer to the first part of that question, all I can say is let us vote in a democratic way and choose which we prefer. There is a lot to be said for both. But I submit that the questioner is wrong in saying that the thirteen-month calendar would eliminate the leap-year day. With respect, it would not. The leap-year day occurs in both calendars alike and whether you have twelve months of thirty-one and thirty days, or thirteen months of twenty-eight days, you cannot avoid the leap-year day.

Then, about the dislocation of corresponding dates, the questioner would like to have the thirteenth month at the end of the year. He could have it there, but in my submission it would cause more dislocation than if it were in the middle. If you think it out I think it is obvious; if you had it at the end of the year, after December, you dislocate December by twenty-eight whole days, and every day of December becomes shifted twenty-eight days back. If, on the other hand, you have it between June and July, then the worst dislocation of any one day is fourteen days. That is why I want it between June and July.

MR. DAMODAR JOSEF: The number of days in one year is 365, and dividing that by seven you would have exactly thirteen months with twenty-eight days in every month.

THE LECTURER: Plus one.

MR. DAMODAR JOSEF: Which would be the only leap-year day; only one instead of two leap-year days. In the case of the twelve-month calendar, you would have one leap-year day every year, which is the 365th day and the 31st of June would recur every four years.

THE LECTURER: No, with respect, it is not so. I just do not agree. That factor is common to both calendars. I really think if the speaker looks at it he will agree with me that neither calendar can score off the other one on that account.

MR. WILLIAM W. SIMPSON: I should like to ask for a little further information on one point, if I may, and to make a comment on a second.

First, I understood Lord Merthyr to say that in Oriental countries there are already some fifteen or sixteen different calendars in operation. What is to be their position with regard to the adoption of such a world calendar? Presumably the fact that so many are still used means that there are fairly deep-rooted objections even to the use of the present calendar. Would the continued use of those various calendars have any economic significance, or is it purely a religious matter?

The second point on which I want to make an observation relates fundamentally, I think, to the same issue of religious freedom and religious difficulty, to which Lord Merthyr referred. He spoke of the difficulties of the Jewish community and, I felt, rather oversimplified his observations there, as indeed he did, perhaps, in relation to one or two other of the difficulties he mentioned in the course of his address, by referring to a particular instance and generalizing from that. The problem of the Jew who comes to the international date line is, I understand, a problem that has been solved by Jewish religious authorities as the exceptional individual case which has to be provided for in any legislative system, whether it is purely civil law or religious law. There always has to be an authorized provision for the exceptional case in this

somewhat complicated world in which we live this rather difficult life. But the basic principle is not affected by the date line. The Sabbath as a Jewish observance, I understand, is fixed on either side of that line and the position of the Jew who crosses it is that he observes the next Sabbath which occurs on whichever side of the date line he finds himself. The underlying principle of the Jewish adherence to the Sabbath—and I understand that this is a point on which all sections of the Jewish community, Orthodox, Liberal or Reformed, are unanimous—the fixed principle is that the Sabbath is always the seventh day. It would be possible, as Lord Merthyr suggested, to have a floating Sabbath, but if economic problems and business problems are to be taken into account in considering the world calendar, there would be considerable economic dislocation, to say nothing of possible infringement of religious liberty, in causing the Jewish Sabbath to float in that way. At the present time there is a modicum of convenience for Jew and non-Jew in that the Sabbath is strictly observed, by Orthodox Jews certainly, from the point of view of non-participation in business. If you have to reckon every year with the Sabbath occurring on a different day, you have a great deal of inconvenience caused and, I think, a fundamental principle of religious liberty possibly violated.

THE LECTURER: First of all, about India, I confess at once I have not made a study of the position in India; but I take it that probably the existence of eleven different calendars in India may be due to religious beliefs. I do not know, I rather guess it is. But, of course, why I mentioned India was, that if we did produce an agreed world calendar there might be more chance of the Indians accepting it. They may be talking now; I rather suspect there are reformers in India now proposing that all India should join in the Gregorian calendar and probably they are saying, "Oh well, let's wait until the western countries, or the whole world, get a world calendar, then we'll all join together".

I expect the questioner is right in saying there are deep-rooted objections, but, of course, deep-rooted objections are not always valid objections, however strongly they may be held. Finally, no one is going to force India to join this calendar unless she wants to. No one is going to be forced to, any more than they were forced to last time.

Now as to the Jews. The questioner has said, and it is new to me, that the crossing of the date line is a permitted exception for a Jew. Is that right? If you can have that permitted exception, why can you not have a permitted exception for all Jews once a year? If it is not wrong to cross the date line, if it is not wrong to have a permitted exception whenever you choose to do so—and I expect there are some who cross it very often—then why is it wrong to have a permitted exception once a year and have seven days between Sabbaths instead of six? I really do not understand that at all.

MR. DAMODAR JOSEF: May I say something about India? Lord Merthyr said that there are eleven calendars in India; I assure him that that is not the case. Of course, India is a very vast country with different castes and communities, but in common public practice only the Gregorian calendar is used, although some religious people or communities have got their own, which is only for private purposes. Muslims have a lunar month and they would not charge from the old month to the new month until they actually saw the moon in the sky. Their festivals are fixed by actually sighting the moon. Similarly Hindus have got their own calendar, but it is only more or less for their private religious purposes. As for our present rulers and leaders, they are very progressive. As a matter of fact, we have had a very serious talk about decimal coinage and weights and measures and rationalizing everything, but we are really waiting for the world to take a step forward.

THE LECTURER: I entirely accept what this gentleman said, and so far as he has

found it necessary to correct me, I accept his correction. I was interested to hear at the end that I was right in guessing that India is really waiting for a general reform.

THE CHAIRMAN: I might mention that there was recently published a long paper by Professor Saha of the University of Calcutta discussing Indian calendars. He mentioned twenty-five calendars; I think they were more or less local calendars such as it was the custom to have in Greece in old times where the different communities each had their own calendar. Professor Saha was advocating the unification and the adoption of what we call the world calendar.

MR. WILLIAM W. SIMPSON: Could I briefly reply to the questions which Lord Merthyr asked? The position, as I understand it, with regard to the crossing of the international date line is that the Jew who does it would observe the seventh day from the previous Sabbath which he observed as the Sabbath himself. He would possibly be in the position of observing two Sabbaths in one week, which could be a work of supererogation, but it is not a breaking of the fundamental principle.

The other question: why if you can make an allowance in an individual case can you not alter the whole system, is a question which surely goes much wider and much deeper. In exceptional circumstances, during the war for example, I understand that certain exceptions were made with regard to the practice of fasting in the Roman Catholic Church. That did not abrogate the whole principle that fasting, from the point of view of that community, was a Christian duty which should be observed at certain times, and when it became possible then the practice was carried out again.

THE LECTURER: I am much obliged to you for making it clear that what the Jew does when he crosses the line is that he has a second, an extra Sabbath. But I still must ask why it cannot be done universally. That is all I want.

MR. M. WALLACH: If this new scheme is, in fact, introduced it would have the additional result that the Jew, the Seventh Day Adventist and various other religious denominations would have to celebrate their respective Sabbaths on different days of the week in different years. If, for instance, at the end of this year we have a blank day, then in the following year the Jewish Sabbath would fall on a Friday, the Christian Sabbath would fall on a Saturday and the Muslim Sabbath on a Thursday. In the following years these various Sabbaths would lead a nomadic existence and it would disrupt the religious life of all those religions to whom the Sabbath is a fundamental tenet of their faith.

Some of the advantages, such as no longer being under the necessity of buying a new diary every year would, I admit, be a gain, but I respectfully submit that, even at the cost of foregoing some of these small economic advantages, a majority of people would, perhaps, be prepared to pay respect to religious scruples and to the principle of freedom of conscience.

Turning now to the purely materialistic argument, I should like to support a previous questioner in that, according to this proposal of a blank day, a complete week would be lost every seven years, and those people, who are in the vast majority, who are paid on a weekly basis, would lose a week's payment every seventh year. Even the Ministry of Insurance would lose a week's insurance every seventh year; so that the economic advantages are certainly not all on one side.

THE LECTURER: The point about wages is a good one, but I think it can easily be got over. Surely we could very easily arrange that one day's pay should be given to an employee on that day if he worked. It would be a national holiday, a bank holiday, and if he worked he would get the wages. If it was said that any kind of payment

ought to be made to him—which well might be said—then it could very easily be paid. I do not see any great difficulty.

MR. EDWARD J. MACDONALD: I was hoping that somebody present might ask the lecturer whether a very careful study has, in fact, been made of existing religious calendars. We have heard about the Jewish calendar, and the Roman calendar is equally important and equally alive, and I do not think it has been considered really carefully. We see the advantages of having Christmas, from the business point of view and the point of view of progress, whatever that is, on a Monday each year, so long as it is the Dickens Christmas we see on the Christmas cards. But I, personally, follow another calendar at the same time, and I would not like to see Christmas perpetually clashing with the fourth Sunday of Advent. Unless Lord Merthyr has gone very carefully into matters of that kind he will not realize that it is not only the question of fixing Easter and the movable feasts, it is a question of recognizing that there is an existing calendar that still goes on and that was followed by the man who was called in by the Government in 1752 to reform the calendar. I want to ask if the living character of these calendars has been very carefully studied and examined. I must say that the references which have been made so naively to general councils do not inspire confidence that he has done so.

THE LECTURER: I frankly confess that I have not studied religious calendars so far as they differ from the calendar which we use every day. But the point was made that there might be objection to the clashing of Christmas Eve and the fourth Sunday in Advent. Am I not right in saying that they do now periodically clash? If that is a vital objection what trouble does it now cause?

MR. MACDONALD: Not perpetually.

THE LECTURER: I understand that although it does not matter if it happens occasionally it must not happen regularly.

MR. MACDONALD: It would be unfortunate.

THE LECTURER: That may be, but I should like to say that quite a number of religious leaders see no objection to this reformed calendar, and presumably they have considered this point. I myself, I confess, never have considered this point about the fourth Sunday in Advent, but presumably those religious leaders who have said, "We see no objection to this at all" have considered it.

MR. H. J. W. LEGERTON: Lord Merthyr has said that there are two main religious bodies opposed to the world calendar. He named the Seventh Day Adventists and the Jewish body. But I should like to point out that there are others that object, others that demand equal attention. I have the honour to be the Secretary of the Lord's Day Observance Society. There are no Jews and, as far as I know, no Seventh Day Adventists numbered amongst the members of the Lord's Day Observance Society, but there are very many members of the well-known denominations of this country who are also members of the Society, and I believe Lord Merthyr will find that there will be a very strong opposition from many members of denominations, not necessarily from the denominations themselves. I do feel that the World Calendar Association has not given the respect due to those religious objections.

One reason why I say this is because I have a copy of the September, 1952, *Journal of Calendar Reform* in my hand. There is an article by a Mr. Joyce in that journal, and here is a paragraph from that article, on page 103: "Without necessarily speaking for the Association my inquiries show that the 'opposition' is for the most part confined

to one or two unorganized and unorganizable groups of a distinctly violent and hysterical disposition, who have taken it upon themselves to resist this most sensible and necessary change by propositions and arguments which the average college boy could answer in five minutes".

Now, Mr. Chairman, that may be humorous to some of us, but personally I think it is serious. I have seen no evidence of hysterics. I have here a volume that was published by the late Chief Rabbi, Dr. Hertz; he led the opposition, more or less, in the League of Nations in 1932, and this volume can be read by any individual here present, and he will see nothing hysterical about it. I have other documents with me from other religious bodies, nothing hysterical about them. But there is one question that no ordinary college boy can answer, and I have not yet had an answer from any other more advanced member of the human species, and that is: "Has anything been done to overcome the deeply-rooted religious objection to the interfering with the cycle of one day's rest in seven, as in our opinion, and in our convictions, laid down by Almighty God?" That cycle will be interfered with by the odd day which the lecturer has chosen to call the *non dies*—why it should be called that I do not know because it is still a day of twenty-four hours—and which the World Calendar Association have proclaimed as a public holiday, I do not know why. But the fact remains that having kept one day in seven regularly all through the year, on the Saturday we go to bed expecting to wake up next day and keep the Lord's day and we find it is world's day, and we do not know what to do. Some of us with deeply-rooted religious convictions will say that we are going to keep that as the Lord's day in spite of what the World Calendar Association or the United Nations have said. So we shall rest that day and the next day we shall go to work, which would be your Sunday. So the complication will be increased considerably. Now that will cause considerable hardship amongst many sincere religious men and women, and I do plead that the World Calendar Association shall give very careful consideration to the overcoming of that problem, because until that is overcome bodies such as my own, and I believe others, will resist this calendar with all the might and main and strength that we can muster.

THE LECTURER: If the Lord's Day Observance Society has been in any way ignored in this matter I apologize to it, and am quite prepared to modify what I said accordingly. But it seems to me that the first point is that you must settle upon which day shall be the Lord's day. If it were decided to adopt this new calendar, and have the Lord's day postponed by one day once a year, then there would be no remaining question about observing the Lord's Day, no change at all. That is one point. But the point now is made that there would be a similar objection on behalf of members of the Society to that taken up by the Jews. That is what it comes to. I did not know that the Society did object in that way, and I am glad to learn, at least I am interested to learn, that they do. The Church of England apparently has no objection at all. I base that on the fact that I never heard of any, and as I have said already, the late Archbishop of Canterbury spoke strongly in favour of this report. So it does seem to me, as the Church of England does not object, nor, as far as I know, does the Roman Catholic Church object nor do any of the Nonconformist churches, other than those I have mentioned, to delaying Sunday one day once a year, that there should have been any difficulty. The observance of the Lord's day, of course, does not come into it, does it?

The article written by Mr. Joyce was severely criticized. I would only point out in his defence—he can defend himself, as he is here to-day—that it was written as a result of a trip to America, and what the Americans are thinking may be a little different from what we are thinking here. But I suggest that the Secretary of the Lord's Day Observance Society and Mr. Joyce should go and have tea together after the meeting.

Finally, the question of the *non dies*. The Secretary of the Society objected to the change and said, "What are we going to do on this day?" Well, I say have a holiday, but if he does not like having a holiday I do not object to his working on that day if he wants to work. He can please himself, I should think, but most people—99·9 per cent of the people—will have a holiday on that day.

THE CHAIRMAN: I am afraid now that we must draw this discussion to a close, but I should like to add one point in regard to the comments of the last speaker. If it is right to work six days and then rest on the seventh day I cannot see that it is wrong to work on six days and rest on the next two. One would easily adjust things in that way when we have the extra day, the world's day or the 366th day in leap year. One further point, I would remind the speaker that it has also been said, the Sabbath was made for man and not man for the Sabbath.

We have had a long discussion, many points have been raised and I think that is a good thing because, after all, the more this problem is discussed the better it will be. The purpose of Lord Merthyr's paper is to provoke discussion and to get people to think about what is, after all, an important problem. As he said, the government attitude is, "We shall do nothing unless there is popular demand". That was the attitude over the question of summer time and it took the needs and exigencies of war for that reform to be introduced.

We are very grateful to Lord Merthyr for coming and explaining this scheme for a reformed calendar, and I should like to move, from the Chair, a hearty vote of thanks to him.

The vote of thanks was carried with acclamation.

DR. S. GOODING, M.A., M.Sc: I should like to propose a vote of thanks to the Chairman, Sir Harold Spencer Jones. The presence of the Astronomer Royal is a distinction at any meeting and at an eloquent and, it seems, a somewhat provocative lecture such as we have heard this afternoon, it is most appropriate that the Astronomer Royal should be here and we thank him for taking the Chair this afternoon.

The vote of thanks to the Chairman was carried with acclamation and the meeting ended.

The following contribution to the discussion has been received since the meeting at which, owing to shortness of time, there was no opportunity to make it:

THE RIGHT REV. MGR. J. M. T. BARTON (President, 1952, Society for Old Testament Study): According to all the information I have, there is for Catholics no question of principle involved in calendar reform, the fixing of Easter and so forth. The Holy See has recognized that the issue is purely disciplinary and not dogmatic; it has merely insisted that there should be acceptance by all states and by the various religious bodies (this, no doubt, in the sense of moral unanimity), that the principle of a seven-day week should remain intact, and that Easter should not be assigned to any day but a Sunday. These are, it may well be said, reasonable and by no means unattainable conditions.

I was recently informed by a former secretary to a late eminent person that he was always instructed to write to enquirers on these lines. Reference may be made to the excellent French encyclopædia entitled *Catholicisme* (Letouzey & Ané, Paris) t.ii, article "Calendrier", col. 383.

G E N E R A L N O T E S

THE SIGNIFICANCE OF PERSPECTIVE IN PAINTING

BY J. KOLBUSZEWSKI, PH.D., D.I.C., F.G.S.

W. Abbott in his recent book *The Theory and Practice of Perspective**, on page 192, said:

"Although representational accuracy is not essential in a work of art, it is questionable whether flagrant violation of the laws of perspective in a picture purporting to depict three-dimensional space will gain ready acceptance by critics so conditioned; or, if accepted, whether the work will prove continuously satisfying to them. On this debatable point the author must end . . ."

The questions we should now like to ask are:

Will the application of the laws of perspective accepted in the majority of the standard books on perspective to a picture satisfy the critics who, among other factors, take perspective into consideration in measuring the value of the pictures?

Is representational accuracy essential, or not? If we take the latter view, what do we really mean? Do we mean that a picture, with perspective laws applied to it strictly, appears to the observer too rigid, stiff and "official", and do we, accordingly, want to have pictures where the application of the laws of perspective is covered by a certain amount of "inaccuracy" to soften the otherwise hardening effect produced by the scientific treatment of three-dimensional space by a painter on his piece of canvas?

Many people are inclined to reply on that last point, "Yes—that is roughly what we want"; but when asked how much, and what sort of "inaccuracy" is required to satisfy them, they will say that they do not know.

It will be our object here to show why they do not know, and why the problem appears to be debatable, by means of a simple experiment.

The experiment involves one of the simplest and oldest constructions in the science of perspective: the division of an intersect or repetition of distances in perspective. The construction shown in Fig. A may be used for dividing in perspective the intersect $A^P D^P$ on the straight line into any number of equal distances between, for example, telegraph poles, trees or any other objects which are equally spaced. Any point on the horizon line can be used for the division, in our case point P. From that point the limiting points of the intersect are projected on the ground line and points A° and D° are obtained. Thus the obtained intersect $A^\circ D^\circ$ is then divided into the required number of intersects, in our case three, $A^\circ B^\circ = B^\circ C^\circ = C^\circ D^\circ = a$, and the points of the division $B^\circ C^\circ$, projected again from the division point P back on the line, will resolve in points B^P and C^P dividing $A^P D^P$ into three equal parts in perspective.

If we want to repeat in perspective that distance "a" to the left or right of the intersect $A^P D^P$, it is enough to measure it from either A° or D° on the ground line and use point P as previously.

Let us now compare the result of that method with the results of some practical experiments, the first involving photography, the second free-hand drawing.

(a) *Photographic perspective*

When we look at the spacing of objects at equal distances shown on photography, the reality of vision and "accuracy" attached to this method of producing perspective

* Blackie and Son Ltd., 1950.

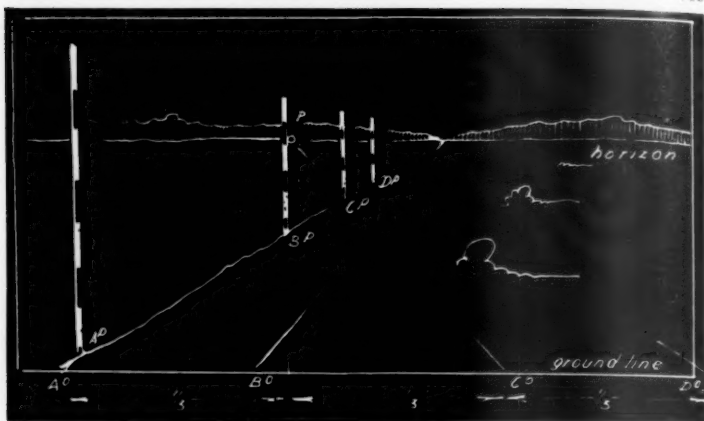


FIGURE A. *The division in perspective by means of orthodox geometrical methods*

views does not seem to require any "corrections", and we may safely say that in the case of a good photograph perspective will not be an obstacle in the way of appreciation of the object that it presents.

The simple construction, previously described, shows that the apparently equal spacing of the objects shown is equal in reality, and that photographic perspective conforms with the general law governing the division or repetition of the intersect in perspective.

"It is reasonable to suppose that the wide circulation of good photographs for over a century has had its effect on the visual appreciation of educated people, particularly those of Europe and America, who are 'probably perspective-conscious as never before; and the implications are of interest'" (W. Abbott, 1950).

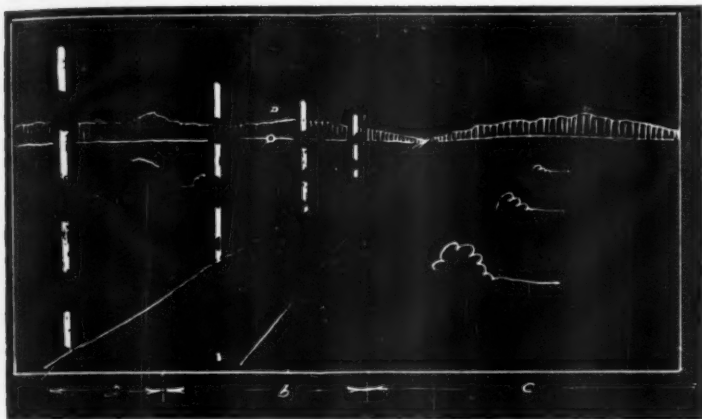
Let us check the truth of this conclusion by experiment, and see how far we have in fact been affected by these good photographs.

(b) *Free-hand drawing experiment*

A drawing was prepared, on which two ranging rods were shown standing on the left side of the straight road traversing the picture from the foreground to the horizon. Various people, of various ages and professions, were asked to insert two more ranging rods on the picture, so that they should divide the distance given by the two initial ranging rods into three intersects, and to do this in such a way that the ranging rods would appear to be equally spaced, in perspective, as they would if equally spaced and seen from that angle in reality. Only the eye had to be used and no construction was admissible.

The results obtained were analyzed as follows. The point P was assumed on the horizon and the four base points of the two original ranging rods, and of the two drawn between then were projected from P on the ground line of the picture. The obtained intersects a, b, c, on the ground line were measured and tabulated.

It could be seen, generally, that in all cases the perspective of the ranging rods was not that of objects placed at equal distances but a perspective of distances increasing in size (see Fig. B) for the latter.

FIGURE B. *The division in subjective perspective**(c) Field experiment*

It was too early to draw any conclusions and the next experiment was arranged. In this new experiment four ranging rods were used in the field, to be fixed at equal distances. Various people were put at a distance from two fixed ranging rods in such a way that their main ray of vision directed at the further standing rod formed an angle with the straight line formed by the two ranging rods. Now each "observer" was asked to direct the placing of the two remaining ranging rods to divide the distance into three equal distances. The results obtained were registered and tabulated.

From 150 experiments it again appeared that the human eye "likes to see" equal distances in a way different from that recorded by a camera, or the linear perspective that we know, and it was proved again that the eye tends to see equal intersects as progressive values or *vice versa*, and that a progressive, in size, row of intersects looks to the eye like a row of equal ones.

(d) Final experiment

In the last experiment two pictures were prepared, the first with the division produced according to the law of division in perspective and the second with the division based on all the experimental results. (No constructional lines were shown on the drawings.) This time various people were asked to state which of the pictures in their opinion gave the better impression of the perspective of equal distances. From 456 replies obtained, 14 were in favour of picture A (objective, geometrical perspective), 442 were in favour of picture B (perspective that will be described as "subjective").

The above findings are borne out on an analysis of many paintings: for example, the reader is sent to one by Giotto, *St. Francis submitted to the ordeal of fire* (1266?-1337) and a recent one by C. Portinari, *The Elopement on Horseback* (1951). The reader is advised to consult any reproductions of these pictures (or of any other dating back to, say, Giotto's times).

Giotto's picture does not show much geometrical perspective, see for example the position and number of vanishing points for any one system of parallel lines. He obviously used the eye for positioning his geometrical elements, and again, in choosing the positions for the lines of the construction of the front of the throne, shows that the "repetitions of distances" in his case rather follow what we call here laws of subjective perspective than the laws of the orthodox perspective. Portinari's picture, on which the barbed wire fence can be similarly analyzed, again shows that this contemporary artist when not using linear perspective also follows the laws of subjective perspective.

The answer to the question raised by W. Abbott appears to be this:

The flagrant violation of the laws of linear perspective in a picture purporting to depict three-dimensional space will not gain ready acceptance by people familiar with these rules, and if accepted, the work will not prove continuously satisfying to them; nor will they be entirely satisfied with orthodox linear perspective drawings. The laws of subjective perspective have to be firmly established, such as the one emerging from the above described experiments, concerning the division of an intersect in perspective. The laws of subjective perspective may satisfy those painters who, having complete knowledge of linear perspective are not happy with the results obtained by its strict application, and prefer to use, for the time being, the judgment of their eye instead.

The problems of subjective, synthetic and linear perspectives are old ones. There are various works on each of them and specialists have investigated their historical development and inter-relations.

The uncompromising application of either of the above perspectives seems to be disturbing to the eye of the spectator especially in more extreme cases of perspective representations.

It is not the object of this paper to solve the questions of perspective. The object is to draw the attention of some of those who are interested in perspective to the works dealing with problems of perspective that differs from the linear one, and for details and general review of the subject, the author would particularly like to send the reader to such an excellent work as John White's *Developments in Renaissance Perspective* (Journal of the Warburg and Courtauld Institutes, Vol. XII, 1949, and Vol. XIV, 1951).

Acknowledgments

The author would like to express his gratitude to Mr. K. Garlick, Lecturer at the Department of Fine Arts, University of Birmingham, for his interest in, and discussion of, the contents of this article.

THE DUTCH SOCIETY OF INDUSTRIAL DESIGNERS

The above Society (Kring van Industriële Ontwerpers), has recently been founded. Its aim is to promote closer contact between designers. Photographs of new designs, and reports on the Society's discussions will be published fortnightly in the Dutch periodical *Economische Voorlichting*.

THE SILK CENTRE LIBRARY

The Silk Centre, 49, Park Lane, London, W.1, has recently started a library. This service, which is available from 10 a.m. to 5 p.m. from Mondays to Fridays, covers the technical and historical aspects of the silk trade and has a section on fashion and design. Admission is free, and arrangements for the loan of books can be made through the librarian.

CARPET DESIGN COMPETITION

Entries are invited by *Furnishing*, the retail furnisher's magazine, for their fifteenth annual carpet competition, the object of which is to encourage good contemporary carpet design. Both students and experienced designers may enter for any of the four different sections, in each of which a prize of £10, one of £5, and diplomas will be awarded.

An additional prize of £60 is being offered by the Federation of British Carpet Manufacturers for the best design of the four first-prize winning entries.

The closing date for entering the competition is 21st September, 1953. Full details may be obtained from the Editor, *Furnishing*, Drury House, Russell Street, London, W.C.2.

CORRESPONDENCE

THE STATE AND THE CRAFTS OF ART

From C. D'O. PILKINGTON JACKSON, A.R.B.S., RAVELSTON ELMS, MURRAYFIELD ROAD, EDINBURGH.

It is well known to those who live or work amongst the craftsmen of art that they are rapidly dying out and that the plight of the silversmiths, lately raised in Parliament and *The Times*, is symptomatic of the general position. A private survey taken in Scotland since the war reflects what is happening throughout the British Isles.

North of the Border in 1911, when the Thistle Chapel was built, there were eighty to ninety sculptor's assistants. Now there are perhaps half a dozen and no apprentices. The wood carvers, of whom there were some dozens fifty years ago, are reduced to a handful. Recently a young man came back from National Service and claimed reinstatement by the firm that trained him. The Court were told that to do so meant paying off a middle-aged carver whose chance of employment elsewhere was slim. The problem was solved by the claimant leaving the craft altogether.

Although no figures are available for the plasterers' shopmen, who make the ornamental and finer plasterwork, it is certain that they are dwindling and that the young men get little opportunity to learn the traditional skills. The wrought-iron smiths have decreased in twenty-five years from over one hundred to less than forty. Few are under middle-age and fewer still practise the higher branches of the craft and the training of learners suffers in proportion.

In 1914 some 20,000 stonemasons were available in Scotland. To-day there are about 2,500 and the intake is far short of the losses. Only in stained-glasswork, where the busy masters toil beside their assistants and apprentices, is the situation healthy through steady demand.

All these invaluable craftsmen work in and about the studios and the workshops, and on the scaffoldings of architecture. To-day their age-old skills are taught in the schools only perfunctorily if at all.

The Craft Centres in London and Edinburgh are providing valuable shop-windows and encouraging high standards for what are conveniently called the portable crafts, which are now largely part-time occupations in conjunction with teaching; but they hardly touch the problem of preserving the whole-time crafts which serve sculpture and architecture.

It is for these latter that a concerted and practical effort should be made throughout Britain because already in some crafts the time is in sight when it may no longer be possible to produce those embellishments to which a cultured nation is heir. Moreover the crafts are the foundations upon which rest the visual arts, and in the past it was from them that the creative artists arose.

The effort can and should be made through the architects. Architecture has always been the leading patron of the arts and their crafts. That patronage is at present withheld largely by taxation. This is where the State could initially act speedily, efficiently and without additional cost or official censorship, by encouraging the Arts Council of Great Britain to treat architects as impresarios and thus nourish the visual arts and their crafts as it does those of drama and music. In doing so the Council would use the greater part of its art expenditure creatively instead of ephemerally and reach a far wider public than that which frequents the Galleries.

Only by present employment and a prospect of reasonable future security can the skills of art be preserved. any other course is but a palliative.

NOTES ON BOOKS

FRA ANGELICO. *By John Pope-Hennessy. The Phaidon Press, 1952. £3 3s*

This, the latest of the Phaidon picture books, is as lovely a thing to examine as any of its predecessors, and like the more recent of them it contains not merely magnificent plates but also a serious introduction and catalogue.

The catalogue, indeed, is a work of such seriousness and so much research and thought have clearly gone to its making that it must remain for some time the standard. At the same time its inclusion in a book of this scope inevitably raises problems. The knowledge gained by a scholar during the preparation of a detailed catalogue of an artist's work should normally serve as the basis for an essay in which the more general considerations are examined adequately. So long as the Phaidon art books (of which the chief appeal has always been the plates) remained largely popular in scope a short introduction was sufficient preface. But since the mobilization of scholars of the authority of Mr. Pope-Hennessy, who incorporate a quantity of original research into the framework of such a series, a conflict inevitably arises. The space allotted for the introduction in this case is quite inadequate to expound the ideas to which the catalogue gives rise. The most interesting of the problems raised by the art of Fra Angelico is his relation to the tremendous innovations of the secular artists who were his contemporaries. The revolution inaugurated by Brunelleschi, Donatello and Masaccio was too great and too sudden to be absorbed quickly or naturally by others. The reaction, indeed, was startling, but it varied most interestingly with different artists. Uccello tried to gobble the new science too quickly, Masolino and Lippo Lippi had it thrust on them, for different reasons, and gradually reverted to less progressive styles later on. Fra Angelico stood initially aloof but absorbed from time to time as much as was good for him, and starting with both feet firmly in the Gothic tradition he ended as an early Renaissance painter. Since the bulk of the introduction (which only runs to thirty-one pages in all) to the present volume is devoted to a biographical study combined with a chronological examination of the works there are only a few sentences left at the end for touching on this problem.

Shortage of space, again, it would be charitable, and perhaps also true, to suppose, may be responsible for the main fault of the text as it stands. Considerably more space would have been needed to enable Mr. Pope-Hennessy to qualify many of the statements which in their present form give a misleading impression. They are presented as statements of fact but are really the result of the weighing of visual comparisons unsupported by documentary evidence. Here are a few examples, chosen from numberless instances in the book: "All of these panels are by a single hand" (p. 12), "Six scenes from the legend of SS. Cosmas and Damian . . . all executed by Zanobi Strozzi" (p. 13), "the figure of the Saint is invariably by Angelico" (p. 26), "The whole of the central panel and the greater part of the panels to right and left [of the National Gallery predella] are . . . the work of a studio assistant" (p. 166).

There is in fact no evidence for any of these statements other than what Mr. Pope-Hennessy's eye tells him. The fact that he is very likely correct in many cases hardly justifies his use of a misleading method of presentation in common, alas, with many other writers on art in the past half century, in whose work, as in that of Mr. Pope-Hennessy, the mere insertion of qualifying words such as "apparently" would often have dispelled uncertainty and obviated a charge of dogmatic arrogance and of employing a method of argument which leads logically back to the nursery.

The second of the examples quoted above raises yet another consideration due to the two conflicting aims of the book. Zanobi Strozzi was a somewhat tenuous follower of Fra Angelico and his name, in this book as in others on the subject, is freely banded about as the author of many paintings which seem below the standard of the master himself. Since his only authentic works are miniatures it would be fascinating to see them reproduced side by side with the larger paintings which could then be attributed to him by stylistic comparison. Few people now writing would be capable of making such an analysis better than Mr. Pope-Hennessy and he must in any case have done it during his preparatory work; yet the need to devote as much space as possible to the plates has evidently precluded its publication.

The style of the introduction is a good utilitarian prose with little attempt at literary graces. If its effect is at times less exhilarating than its subject its meaning is at least perfectly clear. And anyone who wishes for an imaginative interpretation of the Italian Renaissance rather than a factual presentation of the results of modern scholarship should turn not to this book, nor to any other written in this century. He should revert—and with what pleasure does one do so after a surfeit of desiccated twentieth century scholarship—to a writer such as John Addington Symonds, whose comment on Angelico would seem to remain the most penetrating and satisfying in any language: "His world is a strange one—a world not of hills and fields and flowers and men of flesh and blood, but one where the people are embodied ecstasies, the colours tints from evening clouds or apocalyptic jewels, the scenery a flood of light or a background of illuminated gold. His mystic gardens, where the ransomed souls embrace, and dance with angels on the lawns outside the City of the Lamb, are such as were never trodden by the foot of man in any paradise of earth."

Cecil Gould

SHORT NOTES ON OTHER BOOKS

ROCK, WALL AND WATER. *Edited by F. A. Mercer and Roy Hay. Studio publications, [1953]. 18s*

This is volume 4 of the *Studio* garden annual, *Gardens and Gardening*, which each year deals with a different theme. The present publication covers the making and planting of those features in a garden which involve the management of rock or water, whether these are already present, or are introduced by the gardener. The book has many illustrations of such features, as well as of individual plants. It also includes useful charts of plants suitable for various positions, with details of their habits and colours.

THE GAMBIA. *By Lady Southorn. Allen & Unwin, 1952. 21s*

The history of the Gambia since it was first known to European traders, with an account of the country to-day, is here told by Lady Southorn, who spent nearly six years there. She tells the story of the early settlements in some detail, and gives much interesting information about the men—traders and missionaries—who made the Colony.

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FROM THE JOURNAL OF 1853

VOLUME I. 22nd April, 1853

From Proceedings of Institutions

BATTLE.—On Monday evening, Mr. E. Rowse delivered a Lecture at the Mechanics' Institution, on the subject, "Where am I?" The lecture embraced a glance at the aspect of our times, the progress of the physical sciences, recent revelations in astronomy, physical geography, geology, and physiology; and concluded by pointing to the triumph of mind over matter. The lecture was listened to with much attention, and was illustrated by numerous drawings and a map of the world. A vote of thanks was moved at the conclusion by the Rev. E. Parry, and carried by acclamation.

Some Meetings of Other Societies

MON. 20 APR. Electrical Engineers, Institution of, Savoy Place, W.C.2. 6 p.m. *Laboratory Experiments on Protective Gear* (Discussion).

Geographical Society, Royal, S.W.7. 8.15 p.m. Sebastian Snow: *Amazon Adventure*.

TUES. 21 APR. British Architects, Royal Institute of, 66, Portland Place, W.1. 6 p.m. Roland Woods: *Building Legislation—a Help or a Hindrance?*

Industrial Transport Association, at the Royal Society of Arts, W.C.2. 6.30 p.m. H. N. Cabbage: *Municipal Non-Passenger Transport and its responsibilities*.

Manchester Geographical Society, 16, St. Mary's Parsonage, Manchester, 3. 6.30 p.m. Mrs. I. Ramwell: *The Gold Coast*.

Petroleum, Institute of, 26, Portland Place, W.1. 6 p.m. H. S. Gibson: *Two Oilfields in Northern Iraq*.

Refrigeration, Institute of, at the Institution of Mechanical Engineers, Storey's Gate, S.W.1. 5.30 p.m. W. B. Gosney: *An Analysis of the Factors affecting performance of Small Compressors*.

WED. 22 APR. Electrical Engineers, Institution of, Savoy Place, W.C.2. 5.30 p.m. (1) H. M. Barlow and A. E. Karbowski: *An Investigation of the Characteristics of Cylindrical Surface Waves*. (2) H. M. Barlow and A. L. Cullen: *Surface Waves*.

Petroleum, Institute of, at the Institution of Mechanical Engineers, Storey's Gate, S.W.1. 2.30 p.m. *Symposium on The Engine Testing of Lubricating Oils*.

THURS. 23 APR. Electrical Engineers, Institution of, Savoy Place, W.C.2. 5.30 p.m. P. I. Dee: *The Dilemma of Lord Kelvin*.

Road Transport Engineers, Institute of, at the Royal Society of Arts, W.C.2. 7.15 p.m. A. G. Wilson and A. A. Miller: *The Wilson Gearbox in the Field of Commercial Transport*.

Structural Engineers, Institution of, 11, Upper Belgrave Street, S.W.1. 5.30 p.m. J. H. A. Crockett: *Modern Machine Foundation Technique*.

FRI. 24 APR. Mechanical Engineers, Institution of, Storey's Gate, S.W.1. 5.30 p.m. A. T. Bowden, P. Draper and H. Rowling: *The Problem of Fuel Oil Ash Deposition in Open-Cycle Gas Turbines*.

TUES. 28 APR. Electrical Engineers, Institution of, Savoy Place, W.C.2. 5.30 p.m. L. B. S. Golds and P. Schiller: *Motor Problems and Consumers' Load Characteristics*.

Manchester Geographical Society, 16, St. Mary's Parsonage, Manchester, 3. 6.30 p.m. W. P. Packard: *Nepal*.

Wool Education Society, at the Royal Society of Arts, W.C.2. 7.15 p.m. John Barritt: *The Matherproofing of Wool*.

WED. 29 APR. British Sociological Association, at the Royal Society of Arts, W.C.2. 8 p.m. Ivy Pinchbeck: *Social Attitudes to the Problem of Illegitimacy*.

Electrical Engineers, Institution of, Savoy Place, W.C.2. 5.30 p.m. L. G. Brazier, D. T. Hollingsworth and A. L. Williams: *An Assessment of the Impregnated Pressure Cable*.

Folk-Lore Society, at University College, Gower Street, W.C.1. 7.30 p.m. Miss M. Dean-Smith: *Folk Play origins of the English Masque*.

THURS. 30 APR. Chadwick Trust, at the Walker Art Gallery, William Brown Street, Liverpool, 3. 7.30 p.m. S. E. Finer: *Public Health: A comparison between the age of Chadwick and our own*.

Chemical Society, Burlington House, W.1. 7.30 p.m. H. S. Taylor: *The Scientific Problems of Surface Catalysis*.

FRI. 1 MAY. Mechanical Engineers, Institution of, Storey's Gate, S.W.1. 5.30 p.m. (1) J. Roeman and H. G. Buswell: *Design of the Turbine and Manufacture of Some Experimental Internally Cooled Nozzles and Blades*. (2) D. G. Ainley: *Research on the Performance of a Type of Internally Air Cooled Turbine Blade*.

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